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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,265	07/06/2001	Nevein T. Sultan	9-13528-170US	3921
7590 Swabey Ogilvy Renault Suite 1600 1981 McGill College Avenue Montreal, QC H3A 2Y3 CANADA			EXAMINER REFAI, RAMSEY	
			ART UNIT 3627	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/899,265

Applicant(s)

SULTAN ET AL.

Examiner

Ramsey Refai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-15, 17-25 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 10-15 17-25 and 27-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION

*Response to Amendment*

Responsive to Amendment received February 13, 2007. Claims 4, 5, 7, 10 and 11 have been amended. Claims 1-8, 10-15, 17-25, and 27-31 remain pending further examination.

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 10, 12-15, 17-22, 25, and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang (US Patent No. 6,275,492).

3. As per claim 1, Zhang teaches a method of enabling policy-based traffic forwarding in a data network having at least two area border routers (ABR), the method comprising steps of:

generating a link stat advertisement (LSA) message (column 3, line 25), and asserting a route tag in respect of the generated LSA message (column 1, lines 54-60, column 4, lines 59-67) and

at each ABR receiving the LSA message, controlling propagation of the received LSA, into an area of the data network hosted by the ABR, based on a respective forwarding policy having a match criteria corresponding to the asserted route tag (column 1, lines 54-60, column 4, lines 33-49, fig 3, element 76);

wherein the respective forwarding policy of a first ABR differs from that of a second ABR, such that the received LSA message is flooded into the area hosted by the first ABR and

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not flooded into the respective area hosted by the second ABR (column 3, line 42–column 4, line 22).

4. As per claim 2, Zhang teaches the data network is an Open Shortest Path first (OSPF) network (column 3, line 5).

5. As per claim 3, Zhang teaches a route tag comprises one of: an internal route tag associated with an address located within an autonomous system of the data network; and an external route tag associated with an address located outside the autonomous system (column 1, line 54–60, column 4, line 59–67).

6. As per claim 4, Zhang teaches the step of asserting a route tag comprises steps of: setting a route tag value respecting the LSA; and inserting the route tag value into a predetermined field of the LSA (column 1, line 54–60, column 4, line 59–67).

7. As per claim 5, Zhang teaches wherein the route tag value is set by a policy having a match criteria corresponding to a predetermined attribute of the LSA (column 1, line 54–60, column 4, line 59–67).

8. As per claim 6, Zhang teaches wherein the predetermined attribute comprises any one or more of: a source address; a source area; a destination address; and a destination area (column 1, line 54–60, column 4, line 59–67).

9. As per claim 7, Zhang teaches the step of inserting the route tag comprises a step of inserting the route tag value into an external route tag field of the generated LSA (column 1, line 54–60, column 4, line 59–67) wherein the generated LSA is a Type-5 LSA (column 3, lines 4–15. multiple types of LSAs, including Type-5, are well known to be inherent in OSPF environment).

10. As per claim 8, Zhang teaches the step of inserting the route tag comprises a step of inserting the route tag value into an internal route tag field (column 1, line 54–60, column 4, line

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59-67) of a modified Type-3 LSA (column 3, lines 4-15. multiple types of LSAs, including Type-3, are well known to be inherent in OSPF environment).

11. As per claim 10, Zhang teaches the forwarding policy corresponds to one of: a pass decision, in which the LSA is forwarded to a downstream link; and a discard decision, in which the LSA is discarded without forwarding (column 4, lines 10-50; routing table used to determine whether to forward a packet).

12. As per claims 11 and 27, wherein implementation of the forwarding policy further comprises a step of updating a forwarding table using information contained in the LSA as either one of: an inclusion route and an exclusion route (column 1, lines 25-53; information from LSA is used to update forwarding tables).

13. As per claim 14, Zhang teaches an autonomous system border router, and an area border router (column 3, lines 17-21, column 4, line 19).

14. As per claims 12 -13, 15, 17- 22, 25, 28, and 29, these claims contain similar limitations as claims 1-6, and 9-10 above, therefore are rejected under the same rationale.

15. As per claims 23-24 and 30-31, these claims contain similar limitations as claims 7-8 above, therefore are rejected under the same rationale.

#### *Response to Arguments*

16. Applicant's arguments with respect to the previous 103 rejections have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments in view of Zhang have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues that “ ‘ forwarding table’ and ‘ forwarding policy’ are entirely different entities ” , Zhang does not teach or suggest that each

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router is implementing respective different forwarding policies nor that the forwarding tables are used to control the flooding of the LSA.

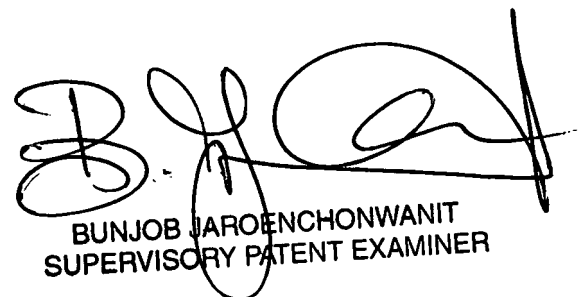
- In response, the Examiner respectfully disagrees. Each router has different forwarding tables, thereby having varying information from other routers. The forwarding tables are used to determine whether or not to forward the packet and if so, to which destination. Since router contains differing forwarding data, their forwarding rules differ.

Furthermore, the Applicants' specification defines the term " forwarding policy" as a match criteria (paragraph [0023] in Applicant' s specification), which is clearly taught by Zhang' s use of a forwarding table. The propagation of the LSAs is controlled by the routers that receive the advertised LSA (column 1, line 25-53) by forwarding the LSA to destinations listed in the forwarding table at each router (column 4, line 23-50).

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner' s supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramsey Refai  
Examiner  
Art Unit 2152  
May 13, 2007

